George	Т.	Ligler,	Ph.D.
		~ , 9 , ~ ,	

C-053

05/10/2006

				139
:37:09	1	surprise	ed if it were a decade before.	139
12:37:11	2	Q	Does the size reducer of the '121 patent	
12:37:15	3	reduce t	the size of images?	
12:37:19	4	A	It generates reduced-size reproductions of	
12:37:26	5	those in	nages.	
12:37:28	6	Q	Was Mr. Beaulier the first to design a	
12:37:32	7	device t	hat generated reduced-size images?	
12:37:34	8	A	No, sir.	
12:37:34	9	Q	Who was?	
12:37:36	10	A	I don't know.	
12:37:37	11	Q	When did it happen?	
12:37:38	12	A	It would have been some years before.	
. 37:40	13	Q	All right. It was known in the art,	
12:37:42	14	correct?		
12:37:42	15	A	Yes, sir, it was.	
12:37:43	16	Q	Was Mr. Beaulier the first to develop a	
12:37:47	17	product	or a system that would generate reduced-size	
12:37:53	18	images?		
12:37:54	19	A	No, sir.	
12:37:54	20	Q	Who did?	
12:37:54	21	A	Well, the Taylor prior art '776 patent and	
12:38:01	22	the '264	patent were two examples of systems	
12:38:05	23	Q	Okay.	
12:38:05	24.	А	that had within them circuitry that	
. *	ı	C 052		

George	Т.	Ligler,	Ph.D.
		,	

		140
:38:08	1	performed, although using different techniques,
12:38:12	2	image size reduction.
12:38:13	3	Q Can we agree that before April 1983 there
12:38:17	4	were people other than Ampex who had made electronic
12:38:19	5	still store systems?
12:38:20	6	A Yes, sir.
12:38:21	7	Q Can we agree that before April 1983 there
12:38:25	8	were people who had developed products that had size
12:38:30	9	reducers?
12:38:30	10	A Yes, sir.
12:38:30	11	Q Can we agree that before April 1983 there
12:38:34	12	were people who had developed systems that could
.38:37	13	reduce the size of video images?
12:38:40	14	A Yes, sir.
12:38:41	15	Q And can we agree that before April of 1983
12:38:44	16	there were people who had developed products or
12:38:46	17	systems to generate reduced-size images, correct?
12:38:49	18	A Yes, sir.
12:38:50	19	Q Can we also agree that before April 1983
12:38:52	20	there were people other than Mr. Beaulier who had
12:38:56	21	developed systems to automatically generate
12:39:00	22	reduced-size images, correct?
12:39:18	23	A The Hell Chromacom system and the Scan/Reco
12:39:25	24	station I believe had that capability. The the
		C-054

		253
00:23	1	Q All right. Is there any reference in
16:00:24	2	either of the patents to a charge-coupled device?
16:00:26	3	A Okay. I've answered the question for the
16:00:29	4	'121 in terms of the hint in column I've answered
16:00:33	5	that question previously, so I'll I'll now look
16:00:35	6	at this one.
16:00:36	7	Q Well, I'm asking a slightly different
16:00:38	8	question
	9	A Oh, I'm I'm sorry.
16:00:38	10	Q because I did ask you last time for a
16:00:40	11	hint.
16:00:41	12	A Yes, sir.
<u>2</u> 30:41	13	Q I'm now asking you is there a reference
16:00:44	14	expressly
	15	A Oh.
16:00:44	1.6	Q in the '121 patent or the incorporated
16:00:48	17	by reference patent for a charge-coupled device?
16:00:50	18	A Okay. For the '121 patent there is no
16:00:53	19	express reference, so now I will look at this other
16:00:55	20	one.
16:00:56	21	Q Sure.
16:00:56	22	A Thank you.
16:02:28	23	I don't see an express reference to a CCD,
16:02:30	24	no, sir.
• : .		C-055

	George	Т.	Ligler,	Ph.D.
--	--------	----	---------	-------

		254
:02:30	1	Q But we agreed that CCDs were known as of
16:02:33	2	the filing date of both of these patents?
16:02:37	3	A Yes, sir.
16:02:38	4	Q Okay. Is there any reference to a color
16:02:43	5	filter array in either of those two patents?
16:02:46	6	A Not in an express reference?
16:02:48	7	Q Yes.
16:02:49	8	A Not in the '121, and I don't think so here
16:02:53	9	either, but I will check.
16:03:22	10	No express reference, no, sir.
16:03:23	11	Q But color filter arrays were known in April
16:03:26	12	1983, correct?
<u>.</u> 03:27	13	A Yes, sir, they were.
16:03:31	14	
16:03:33	15	
16:03:36	16	
16:03:37	17	
16:03:39	18	REDACTED
16:03:41	19	
16:03:41	20	
16:03:44	21	
16:03:44	22	
16:03:45	23	•.
16:03:47	24	
		C-056

George T. Ligler, Ph.	.D	
-----------------------	----	--

			9.0., , , , , , , , , , , , , , , , , , ,	, 200
-: 03:49	1		REDACTED	255
16:03:52	2			
		Q	Let me ask you to assume that you have a 3	
16:03:55	3	million	megapixel a 3 megapixel camera.	
16:04:01	4	A	Okay.	
16:04:02	5	Q	Okay? Do you have that in mind?	
16:04:04	6	A	Yes, sir.	
16:04:04	7	Q	If you have a 3 megapixel camera, how many	
16:04:08	8	pixels a	re interpolated in the CFA interpolation	
16:04:12	9	pro	process?	
16:04:18	10		MR. BEAMER: Objection, incomplete	
16:04:20	11	hypothet	ical.	
16:04:20	12	A	Would would you care to put I was	
04:22	13	about to	say, would you care to put a little more	
16:04:25	14	meat on	those bones?	
16:04:26	15	BY MR. I	EE:	
16:04:26	16	Q	Can you not answer that question?	
16:04:27	17	A	It would depend on the design of the	
16:04:30	18	camera.	The answer could be different.	
16:04:32	19			
16:04:35	20			
16:04:38	21		REDACTED	
16:04:38	22			
16:04:41	23			
16:04:42	24			

LegaLink Boston, a Merrill Company (617) 542-0039

C-057

George	Т.	Ligler,	Ph.D.
--------	----	---------	-------

:47:23	1	REDACTED 28	80
16:47:24	2	BY MR. LEE:	
16:47:24	3	Q Is pixel data, as that term is used in the	
16:47:28	4	'121 patent, mathematical?	
16:47:41	5	A Pixel data can be represented	
16:47:43	6	mathematically. It can also its values can be	
16:47:46	7	discerned on a display as well.	
16:47:49	8	Q So is it your testimony that data strike	
	9	that.	
16:47:56	10	As the word "data" is used in claim 7, does	
16:48:05	11	it refer to mathematical information?	
16:48:09	12	MR. BEAMER: Objection.	
48:16	13	A Data is represented using 1s and 0s which	
16:48:23	14	is mathematical data, yes.	
16:48:26	15	BY MR. LEE:	
16:48:26	16	Q Okay. Let me show you you've referred	
16:48:30	17	to Mr. Boncelet on a number of occasions.	
16:48:33	18	A I have, yes.	
16:48:33	19	Q You've reviewed his report, correct?	
16:48:35	20	A His report, yes.	
16:48:36	21	Q Have you reviewed this testimony?	
16:48:38	22	A As I testified earlier today, only a	
16:48:40	23	portion of it, sir.	
16:48:41	24	Q Did you review his testimony concerning the	
,		C-058	

ť

1	CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC
2	I, Joan V. Cain, the officer before whom
3	the foregoing proceedings were taken, do hereby
4	certfy that the foregoing transcript is a true and
5	correct record of the proceedings; that said
6	proceedings were taken by me stenographically and
7	thereafter reduced to typewriting under my
8	supervision; and that I am neither counsel for,
9	related to, nor employed by any of the parties to
1.0	this case and have no interest, financial or
11	otherwise, in its outcome.
12	IN WITNESS WHEREOF, I have hereunto set my
13	hand and affixed my notarial seal this 15.44 day of
14	Miny 2006.
15	
16	My commission expires: CERTIFIED ORIGINAL
17	June 15, 2009 LEGALINK BOSTON
18	· · · · · · · · · · · · · · · · · · ·
19	Gan V. Cain
20	NOTALY PUBLIC IN AND FOR THE
21	DISTFICT OF COLUMBIA
22	

George T. Ligler, Ph.D., Vol. 2

05/11/2006

1	TM MUE INTMED CONVOCA DICORDICO COMPO	342
	IN THE UNITED STATES DISTRICT COURT	
2	FOR THE DISTRICT OF DELAWARE	
3	x	
4	AMPEX CORPORATION,)	
5	Plaintiff,)	
6	v.) C.A. No.	
7	EASTMAN KODAK COMPANY, et al.,) 04-1373 (KAJ)	
8	Defendants.)	
9	x	
10	CERTIFIED ORIGINAL LEGALINK BOSTON	
11	BOSTON	
12	Videotaped Deposition of	
13	GEORGE T. LIGLER, Ph.D.	
14	Washington, D.C.	
15	Thursday, May 11, 2006	
16	9:38 a.m.	
17	,	
18		
19		
21		
22	Job No.: 22-77797	
23	Pages 342 - 651, Volume 2	
24	Reported By: Joan V. Cain	

		1		206
:26:59	1	A	Yes.	386
10:26:59	2	Q	Does it mean different things in those two	
10:27:02	3	places?		
10:27:06	4	A	The meaning in claim 7 is broader than the	
10:27:10	5	meaning	one would take if one restricted one's	
10:27:15	6	definiti	on of video to what is described as the	
10:27:17	7	video mo	de in the Kodak cameras.	
10:27:19	8	Q	Right. So the video mode of the Kodak	
10:27:22	9	cameras	is a subset within the broader category of	
10:27:26	10	video as	you've defined it, correct?	
10:27:29	11	A	Yes.	
10:27:29	12	Q	But that video mode doesn't satisfy the	
27:31	13	limitati	ons of claim 7 or any of the other claims,	
10:27:35	14	correct?		
10:27:35	15	A	That's right.	
10:27:36	16	Q	Why?	
10:27:39	17	A	Okay. One has to look at the claims in	
10:27:41	18	their en	tirety, and in the video mode, video mode	
10:27:48	19	as as	indicated in the user manuals it's also	
10:27:53	20	called m	ovie mode, but fine. It's called video mode	<u>;</u>
10:27:57	21	for at 1	east a number of the cameras the claimed	
10:28:03	22	reduced-	size images are not generated in the manner	
10:28:07	23	claimed.	The multi-image display is not there is	,
10:28:15	24	not a mu	lti-image display of the reduced-size images	i .
:				

		387
17:28:18	1	that weren't generated as claimed anyway, generated
10:28:25	2	as as claimed. Those are two reasons.
10:28:27	3	I I haven't looked element by element to
10:28:30	4	look at all the reasons.
10:28:31	5	Q Well, fair enough. But there is a video or
10:28:35	6	a movie mode in some of the accused products,
10:28:37	7	correct?
10:28:38	8	A Oh, yes.
10:28:39	9	Q That video or movie mode would satisfy your
10:28:42	10	definition of video. It would be a subset of your
10:28:45	11	definition of video, correct?
10:28:46	12	A Oh, yes.
28:47	13	Q It would also satisfy Kodak's definition of
10:28:49	14	video, correct?
10:28:56	15	A Kodak's current definition, and the reason
10:28:59	16	I hesitate is there have been a number of
10:29:01	17	definitions. Some of them it might not, but the
10:29:04	18	current definition it would, yes.
10:29:05	19	Q Right. And for the accused cameras that
10:29:10	20	have that video mode, none of them would literally
10:29:14	21	satisfy each and every limitation of the asserted
10:29:18	22	claims, correct?
10:29:18	23	A In that mode.
10:29:19	24	Q Yes.
• •		C-062

		George T. Ligler, Ph.D., Vol. 2	05/11/2006
			390
`:31:48	1		
10:31:50	2		
10:31:50	3		
10:31:52	4		
10:31:53	5	REDACTED	
10:31:57	6		
10:32:02	7		
10:32:04	8		
10:32:04	9		
10:32:05	10	Q Okay. Now, let me show you and mark as	
10:32:08	11	Exhibit D-18 a document from Ampex Corporation	
10:32:16	12	bearing Bates stamp No. AX D 009898 through 00993	15.
	13	(Ligler Deposition Exhibit D-18 was	5
	14	marked for identification and was attached to the	•
10:32:33	15	deposition transcript.)	
10:32:33	16	A Thank you.	
10:32:50	17	BY MR. LEE:	
10:32:51	18	Q Do you have Exhibit D-18 before you?	
10:32:53	19	A Yes, sir. Excuse me. I'm just trying t	ю.
10:32:56	20	rearrange the papers a little. Yes, I do. Thank	
10:32:59	21	you.	
10:32:59	22	Q Have you seen it before?	
10:33:16	23	A No.	
10:33:17	24	Q Well, I'll represent to you that this is	a

		424		
20:03	1	A Information. If we're in the if we're		
11:20:08	2	talking in the context of a computer system I		
11:20:11	3	mean, data generally and broadly is information.		
11:20:13	4	Q Right.		
11:20:14	5	A But if we're talking in the you know,		
11:20:16	6	presuming that we're talking in the context of a		
11:20:18	7	computer system, it would be information represented		
11:20:23	8	by electronic signals.		
11:20:25	9	Q Would it be numbers, if we're talking about		
11:20:30	10	computers?		
11:20:32	11	A The data could be interpreted as numbers,		
11:20:34	12	yes.		
. 20:35	13	Q So		
11:20:36	14	A It it is stored as numbers.		
11:20:38	15	Q So let's break it down. So the data is		
11:20:41	16	transmitted as electronic signals in computers,		
11:20:44	17	correct?		
11:20:44	18	A Yes.		
11:20:48	19	Q And it is stored as numbers, correct?		
11:20:52	20	A It is stored as a binary pattern which can		
11:20:54	21	be interpreted as a number, yes.		
11:20:56	22	Q Now, what is the definition of data to one		
11:20:58	23	of ordinary skill in the art in 1983, as used in		
11:21:04	24	claim 7?		
		C-065		

ે:09:29	1	426 THE VIDEOGRAPHER: This marks the beginning
12:09:30	2	of tape number 2, Volume 2, in the deposition of
12:09:34	3	Dr. Ligler. We're back on the record. The time's
12:09:37	4	12:09 p.m.
12:09:44	5	BY MR. LEE:
12:09:45	6	
12:10:04	7	Q Dr. Ligler, are pixel values data?
		A Sure.
12:10:04	8	Q And in the accused cameras, are pixel
12:10:08	9	values stored as data?
12:10:09	10	A Yes, sir.
12:10:18	11	Q In the '121 patent there is an embodiment
12:10:22	12	or an example disclosed, correct?
.10:24	13	A Yes, sir.
12:10:25	14	Q There are numbers transferred to bulk store
12:10:27	15	in that example, correct?
12:10:32	16	A Yes, sir.
12:10:32	17	Q Is it correct that those numbers are YCC
12:10:39	18	color values in the example described?
12:10:49	19	A A representation of YCC color values would
12:10:55	20	be transferred to disk, yes.
12:10:57	21	Q Is the
12:10:58	22	A Or actually would be stored on disk. I'm
12:10:59	23	sorry. I misspoke. Beg your pardon.
12:11:01	24	Q Are the rep is the representation of YCC
:. ·		C-066

::

		427
:11:04	1	color values stored as numbers in the disclosed
12:11:08	2	example?
12:11:11	3	A Yes, sir.
12:11:11	4	Q Okay. Now, I want you to go back to the
12:11:14	5	time frame of 1983.
12:11:16	6	A Okay.
12:11:19	7	Q Would a person of ordinary skill in the art
12:11:21	8	in 1983 have understood that pixel values for
12:11:24	9	digital images could be stored in a frame store?
12:11:28	10	A Yes.
12:11:29	11	Q Same time frame, same person of ordinary
12:11:33	12	skill in the art. Would that person of ordinary
11:35	13	skill in the art in 1983 have understood that pixel
12:11:38	14	values for a digital image could be stored in a bulk
12:11:42	15	store?
12:11:43	16	A Yes.
12:11:43	17	Q Would a person of ordinary skill in the art
12:11:47	18	in 1983 understand that pixel values could be
12:11:50	19	transferred from a frame store to a disk store?
12:12:00	20	A With appropriate encodings, yes.
12:12:02	21	Q And when the pixel values were were
12:12:05	22	transferred, that would be the transfer of data,
12:12:08	23	correct?
12:12:09	24	A Yes.
		C-067

		George T. Ligler, Ph.D., Vol. 2	L/2006
			438
:29:52	1		
12:30:00	2		
12:30:03	3		ĺ
12:30:06	4		
12:30:09	5		
12:30:12	6	REDACTED	
12:30:14	7		
12:30:19	8		
12:30:25	9		
12:30:27	10	-	
12:30:30	11		
12:30:34	12		
. 30:39	13	Q So which of the two is the first is the	
12:30:42	14	first resolution, as that term is used in claim 7?	
12:30:49	15	Do you have the question in mind? Do you remember	
12:30:52	16	there's a first resolution	
12:30:53	17	A Sure.	
12:30:54	18	Q of the full-size image?	
12:30:56	19	A Right.	
12:30:56	20	Q You just told me that there's a difference	
12:30:59	21	between these two images in resolution. Which of	
12:31:02	22	the two is the first resolution?	
12:31:06	23	A Well, I didn't tell you there was a	
12:31:07	24	difference between the images. I told you there was	
•		Same and Jour Great Minds	

			_
:03:02	1	the words that were written in paper	.3
15:03:05	2	Q Right.	
15:03:06	3	A 30 and	
15:03:07	4	Q Paper 29 I believe it was.	
15:03:09	5	A What was it? I'll take your word for it.	
15:03:11	6	Q Take my word for it.	
15:03:13	7	A I'll take your word for it.	
15:03:14	8	MR. BEAMER: It's paper 30.	
15:03:16	9	BY MR. LEE:	
15:03:16	10	Q Okay. Well whatever it is, it's consistent	
15:03:18	11	with that phrase I just read to you, right?	
15:03:20	12	A Whatever it is, it is consistent with that	
: . 03:23	13	phrase and inconsistent with what anyone of ordinary	
15:03:27	14	skill in the art would think.	
15:03:28	15	Q Right. Answer my question now, and don't	
15:03:32	16	embellish. Is the claim interpretation that Kodak	
15:03:38	17	proposes consistent with the representation that	
15:03:41	18	Ampex made to the Patent Office at page 61746 of the	
15:03:45	19	file history?	
15:03:45	20	MR. BEAMER: Objection, mischaracterizes	
15:03:47	21	the record.	
15:03:48	22	A Yeah, representation, it is consistent with	
15:03:52	23	the words on the page in that paper.	
15:03:57	24	BY MR. LEE:	
••		C-069	

		522
:23:03	1	read this this being the specification passage
15:23:05	2	you're asking me about and the CPU would make the
15:23:09	3	selection as to where the position is.
15:23:10	4	Q So if the selection is made by the CPU,
15:23:15	5	then it is automatic, but if the selection's made by
15:23:19	6	the operator, it's not automatic, correct?
15:23:24	7	A If the operator as stated in Ampex's
15:23:27	8	construction needs to orchestrate each step, I don't
15:23:34	9	think that's what's being discussed in the means
15:23:36	10	plus in the means plus function element, means
15:23:44	11	responsive to in claim 7.
15:23:49	12	Q And the operator of a digital camera is the
23:51	13	person taking the picture or selecting the mode,
15:23:54	14	correct?
15:23:54	15	A Yes.
15:23:54	16	Q And if the operator is if the operator
15:24:01	17	or the person taking the picture
15:24:02	18	A Sure.
15:24:03	19	Q is selecting the mode, that's not
15:24:05	20	automatic, correct?
15:24:08	21	A Selecting the mode, the
15:24:10	22	MR. BEAMER: Objection, incomplete
15:24:12	23	hypothetical.
15:24:14	24	A · The
:		C-070

			F 22
24:14	1	MR. BEAMER: Vague.	523
15:24:15	2	A The selection of a mode on the dial or	
15:24:18	3	through some menu is not automatic that is on a	
15:24:23	4	camera, that's correct.	
1 5:24:25	5	BY MR. LEE:	
15:24:25	6	Q Now, where does the specification describe	
15:24:30	7	the selective, that is automatic, transfer?	
15:24:35	8	A I'm sorry. We were discussing selective	•
15:24:39	9	generating.	
15:24:40	10	Q I'm sorry. Let's do that. Where does	
15:24:42	11	it where does specification describe the	
15:24:43	12	automatic generation?	
24:58	13	A Column 4, the size in the lines 1	
15:25:10	14	through 7 discuss the operation of the size reducer,	
15:25:17	15	that it's controlled by the CPU over the system bus	
15:25:20	16	and it's operable to receive the data, and then the	
15:25:25	17	data from the frame store to convert to do the	
15:25:31	18	size reduction.	
15:25:33	19	Q Have you completed your answer?	
15:25:35	20	A No. And then in column 4, lines 52 to 54,	
15:26:01	21	when describing the browsing mode, the patent	
15:26:04	22	states, "This mode is useful when scanning all of	
15:26:06	23	the images stored by the disk store." Well, for	
15:26:13	24	this to be the case, scanning all of the images	

George.T.	Ligler,	Ph.D.,	Vol.	2
-----------	---------	--------	------	---

		George T. Ligler, Ph.D., Vol. 2	11/2006
			535
41:25	1	and output from RAM.	
15:41:27	2	A Okay.	
15:41:27	3	Q Claim 7 requires RAM, correct?	
15:41:29	4	A Yes, sir.	
15:41:30	5	Q As you told me, RAM's going to have an	
15:41:33	6	input and output, correct?	
15:41:34	7	A There will be a means for inputting and	
15:41:37	8	outputting, yes.	
15:41:38	9	Q Claim 8 requires RAM, correct?	
15:41:40	10	A Yes, sir, it does.	
15:41:41	11	Q And it specifically requires an input port	
15:41:43	12	and an output port?	
. 41:46	13	A Yes.	
15:41:46	14	Q So by your interpretation, the addition of	
15:41:48	15	the words "an input port and an output port" add	
15:41:52	16	nothing to claim 8 that's not in claim 7, correct?	
15:41:54	17	A With regard to the RAM?	
15:41:55	18	Q Yes.	
15:42:00	19	A That's right.	
15:42:01	20	Q Right. Now, if Kodak's definition is	
15:42:03	21	adopted by the court, then the defendants' strik	e
	22	that.	
15:42:09	23	If Kodak's definition is adopted by the	
15:42:12	24	court, then the accused Kodak products would not	

LegaLink Boston, a Merrill Company (617) 542-0039

C-072

George T. Ligler, Ph.D., Vol. 2

05/11/2006

				536
:42:15	1	literall	y meet the input port and output port	
15:42:18	2	requirem	ent of claims 8 and 14, correct?	
15:42:25	3	A	In my view, they would not, that's right.	
15:42:28	4	Q	And do you know whether the phrase "input	
15:42:29	5	port and	output port" was added by amendment to the	
15:42:32	6	claims?		
15:42:34	7	A	That we should review.	
15:42:36	8	Q	Well, if you don't know, we're not going to	
15:42:39	9	take the	time to do that.	
15:42:41	10	A	Okay.	
15:42:41	11	Q	Okay. You don't know without consulting	
15:42:45	12	the file	history?	
42:45	13	A	I think it was, but I'd like to confirm it.	
15:42:48	14	Q	All right. It's fine. I'll withdraw the	
15:42:50	15	question	•	
15:42:51	16	A	Okay.	
15:42:51	17	Q	Look at claim 12.	
15:42:53	18	A	Claim 12.	
15:42:55	19	Q	Right.	j
15:42:55	20	A	Okay.	
15:42:56	21	Q	Claim 12 begins, "A video still store	
15:43:04	22	system c	omprising."	
15:43:07	23	A	Yes, sir.	
15:43:08	24	Q	And you understand what a video still store	
			C-073	

1	CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC
2	I, Joan V. Cain, the officer before whom
3	the foregoing proceedings were taken, do hereby
4	cert.fy that the foregoing transcript is a true and
5	correct record of the proceedings; that said
6	proceedings were taken by me stenographically and
7	thereafter reduced to typewriting under my
8	supervision; and that I am neither counsel for,
9	related to, nor employed by any of the parties to
1.0	this case and have no interest, financial or
1.1	otherwise, in its outcome.
1.2	IN WITNESS WHEREOF, I have hereunto set my
13	hand and affixed my notarial seal this 15th day of
1:	Miny 2006.
15	·
16	My commission expires: CERTIFIED ORIGINAL
17	June 15, 2009 LEGALINK BOSTON
1,8	
19	Dan V. Cain
20	NOTE Y PUBLIC IN AND FOR THE
21	DISTRICT OF COLUMBIA

CERTIFICATE OF SERVICE

I hereby certify that on June 20, 2006, I electronically filed the Appendix to Defendants' Reply Brief in Further Support of Their Motion For Summary Judgment of Non-Infringement to with the Clerk of the Court using CM/ECF which will send notification of such filing to the following:

Jack B. Blumenfeld, Esquire Julia Heaney, Esquire Morris, Nichols, Arsht & Tunnell 1201 N. Market Street P.O. Box 1347 Wilmington, Delaware 19899

and that I caused copies to be served upon the following in the manner indicated:

VIA E-MAIL

Jesse J. Jenner, Esquire Ropes & Gray LLP 1251 Avenue of the Americas New York, NY 10020

VIA E-MAIL & FEDERAL EXPRESS

Norman H. Beamer, Esquire Ropes & Gray LLP 525 University Avenue Palo Alto, CA 94301

VIA E-MAIL & HAND DELIVERY

Jack B. Blumenfeld, Esquire Julia Heaney, Esquire Morris, Nichols, Arsht & Tunnell 1201 N. Market Street P.O. Box 1347 Wilmington, Delaware 19899

> /s/ Collins J. Seitz, Jr. Collins J. Seitz, Jr. (Bar No. 2237) Connolly Bove Lodge & Hutz LLP P.O. Box 2207 1007 North Orange Street Wilmington, DE 19899

CERTIFICATE OF SERVICE

I hereby certify that on June 27, 2006, I electronically filed the Redacted Appendix to Defendants' Reply Brief in Further Support of Their Motion for Summary Judgment of Non-Infringement with the Clerk of the Court using CM/ECF which will send notification of such filing to the following:

Jack B. Blumenfeld, Esquire Julia Heaney, Esquire Morris, Nichols, Arsht & Tunnell 1201 N. Market Street P.O. Box 1347 Wilmington, Delaware 19899

and that I caused copies to be served upon the following in the manner indicated:

VIA E-MAIL

Jesse J. Jenner, Esquire Ropes & Gray LLP 1251 Avenue of the Americas New York, NY 10020

VIA E-MAIL & FEDERAL EXPRESS

Norman H. Beamer, Esquire Ropes & Gray LLP 525 University Avenue Palo Alto, CA 94301

VIA E-MAIL & HAND DELIVERY

Jack B. Blumenfeld, Esquire Julia Heaney, Esquire Morris, Nichols, Arsht & Tunnell 1201 N. Market Street P.O. Box 1347 Wilmington, Delaware 19899

> /s/ Collins J. Seitz, Jr. Collins J. Seitz, Jr. (Bar No. 2237) Connolly Bove Lodge & Hutz LLP P.O. Box 2207 1007 North Orange Street Wilmington, DE 19899